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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
YANG, RYAN R	

ART UNIT	PAPER NUMBER
2672	10

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/733,942	WATANABE, TERUE	
	Examiner	Art Unit	
	Ryan R Yang	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on 6/4/2004 .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1,5-7 and 9-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,5-7 and 9-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 6/4/2004. This action is final.

2. Claims 1-20 are pending in this application. Claims 1, 5-7 and 9-20 are independent claims. In the Amendment, filed on 6/4/2004, non of the claims were amended.

3. This application claims foreign priority dated 12/28/99.

4. The present title of the invention is "Method of displaying magnified and reduced areas and apparatus thereof" as filed originally.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (6,219,052) in view of Masashi (JP PN 11-109945), and further in view of Ramage (4,790,028).

As per claim 1, Gould discloses a method of displaying magnified or reduced areas of a diagram, comprising the steps of:

storing diagram linkage information as to how other portions of a diagram are affected as to size, shade of color and pattern density when a certain portion of a diagram is magnified or reduced (Figure 11 60 relative controller box which triggers the relative control function);

magnifying or reducing the certain portion of the diagram with a designated magnification or reduction ratio (Figure 11 60 "When the relative controller box 60 is clicked on and dragged rightward ... that the non-salient (non-highlighted) parts of the original screen 57 have been shrunk or condensed", column 6, line 6-10);

magnifying/reducing the other portions of the diagram other than the magnified or reduced portion of the diagram in accordance with the diagram linkage information (Figure 11 60 "When the relative controller box 60 is clicked on and dragged rightward ... that the non-salient (non-highlighted) parts of the original screen 57 have been shrunk or condensed", column 6, line 6-10);

obtaining display specification information characterizing the magnification or reduction ratio of each portion of the diagram (Figure 11 58); and

displaying each portion of the diagram based on the display specification information characterizing each portion magnification or reduction ratio including displaying a scale indicating the size of the diagram as well as each of the portions of the diagram wherein the shade of color and pattern density of portions of the diagram and the corresponding portion of the scale are changed in correspondence to the magnification or reduction ratios of these portions to distinguish such changed portions from one another and from unchanged portions of the diagram so that the portions of the diagram are characterized differently depending on their magnification or reduction ratio in the display (Figure 11 70 where the scroll bar has marked segment represents "the scope of the salient segments and thus the modified text representation", column 6, line 23-24; as for the pattern density, since the size of the scroll indicator changes

with the size of the portion, and the pattern density also changes with the portion, it would have been obvious to one of ordinary skill in the art to consider making the scroll bar indicator to also indicate the density in order to know the changes in density).

Gould discloses a method of displaying magnified or reduced areas of a diagram. It is further noted that Gould discloses intensity of the color can be used to illustrate level of magnifications (column 7, line 18-19). It is noted that Gould does not explicitly disclose the shade of color changes with the magnification or reduction ratio, however, this is known in the art as taught by Masashi. Masashi discloses an image display method wherein the color changes in accordance with the size of the image (see Abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Masashi into Gould because Gould discloses a method of displaying magnified or reduced areas of a diagram and Masashi discloses the color shade can be changed in proportion in order to increase the change effect.

Gould and Masashi disclose a method of displaying magnified or reduced areas of a diagram. It is noted that Gould and Masashi do not explicitly disclose representing unchanged portions of the diagram, however, this is known in the part as taught by Ramage. Ramage discloses a method of representing magnified region with corresponding reduced region and an unchanged region (Figure 3).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ramage into Gould and Masashi

because Gould and Masashi disclose a method of displaying magnified or reduced areas of a diagram and Ramage discloses an unchanged region can also be displayed in order for easy comparison with the changed portions.

7. Claims 5-6, 9-10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Gould (6,219,052) and further in view of Ramage (4,790,028).

8. As per claim 5, Gould discloses an apparatus for displaying magnified or reduced area, comprising:

means for storing diagram linkage information as to how size and pattern density of other portions of a diagram are affected when a certain portion of a diagram is magnified or reduced (Figure 11 60 relative controller box which triggers the relative control function);

means for magnifying or reducing the certain portion of the diagram with a designated magnification or reduction ratio (Figure 11 60 "When the relative controller box 60 is clicked on and dragged rightward ... that the non-salient (non-highlighted) parts of the original screen 57 have been shrunk or condensed", column 6, line 6-10);

means for magnifying or reducing the other portions of the diagram other than the magnified or reduced portion of the diagram in accordance with the diagram linkage information (Figure 3 52 where the subsequently linked pages has more reduced images);

means for obtaining the display specification information corresponding to the magnification or reduction ratio of each of the portions of the diagrams (Figure 11 60 "When the relative controller box 60 is clicked on and dragged rightward ... that the

non-salient (non-highlighted) parts of the original screen 57 have been shrunk or condensed", column 6, line 6-10); and

means for displaying each portion of the diagram based on the display specification information characterizing to each portion magnification or reduction ratio so that the pattern densities of the different portions of the diagram are characterized differently from each other and from unchanged portions of the diagram depending on their magnification or reduction in the display (Figure 11 70 where the scroll bar has marked segment represents "the scope of the salient segments and thus the modified text representation", column 6, line 23-24; as for the pattern density, since the pattern density changes with the magnification or reduction ration, it is inherent the indicator also indicate the changes in density).

Gould discloses a method of displaying magnified or reduced areas of a diagram. It is noted that Gould does not explicitly disclose representing unchanged portions of the diagram, however, this is known in the part as taught by Ramage. Ramage discloses a method of representing magnified region with corresponding reduced region and an unchanged region (Figure 3).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ramage into Gould because Gould discloses a method of displaying magnified or reduced areas of a diagram and Ramage discloses an unchanged region can also be displayed in order for easy comparison with the changed portions.

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Gould. It is further noted that both software and hardware means are functionally equivalent.

9. As per dependent claim 6, Gould and Ramage demonstrated all the elements as applied to the rejection of independent claim 5, supra, and Gould further discloses means for displaying each portion of the diagram includes the means for displaying a scale indicating the size of the diagram as well as each of the portions of the diagram (Figure 11 70 where the scroll bar has marked segment represents "the scope of the salient segments and thus the modified text representation", column 6, line 23-24).

10. As per claim 9, Gould discloses a computer program on a computer-readable recording medium for displaying a single page diagram having magnified and reduced areas, wherein the program comprises:

software for diagram linkage information indicating how other portions of a diagram are to be reduced to maintain display of the full diagram when a certain portion of the diagram is magnified (Figure 11 60 relative controller box which triggers the relative control function);

software responsive to the diagram and image information for magnifying the certain portion of the diagram with a designated magnification ratio (Figure 11 60 "When the relative controller box 60 is clicked on and dragged rightward ... that the non-salient (non-highlighted) parts of the original screen 57 have been shrunk or condensed", column 6, line 6-10);

software for reducing the portions of the diagram other than the magnified or reduced portion of the diagram in accordance with the diagram linkage information to compensate for the increase in the certain portion (Figure 11 60 "When the relative controller box 60 is clicked on and dragged rightward ... that the non-salient (non-highlighted) parts of the original screen 57 have been shrunk or condensed", column 6, line 6-10);

software for obtaining the display specification information characterizing the magnification or reduction ratio of each of the portions of the diagram (Figure 11 58);

software for displaying each of the portions of the diagram in accordance with the display specification information characterizing each magnification or reduction ratio so that the magnified and reduced portions of the diagram are characterized differently from each other and unchanged portions of the diagram depending on their magnification or reduction ratio in the display (Figure 11 70 where the scroll bar has marked segment represents "the scope of the salient segments and thus the modified text representation", column 6, line 23-24).

Gould discloses a method of displaying magnified or reduced areas of a diagram. It is noted that Gould does not explicitly disclose representing unchanged portions of the diagram, however, this is known in the part as taught by Ramage. Ramage discloses a method of representing magnified region with corresponding reduced region and an unchanged region (Figure 3).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ramage into Gould because Gould

discloses a method of displaying magnified or reduced areas of a diagram and Ramage discloses an unchanged region can also be displayed in order for easy comparison with the changed portions.

11. As per claim 10, Gould and Ramage demonstrated all the elements as applied to the rejection of independent claim 9, supra, and Gould further discloses wherein the software for displaying each of the portions of the diagram includes software for displaying a scale indicating a size of the diagram as well as each of the portions of the diagram (Figure 11 70 where the scroll bar has marked segment represents "the scope of the salient segments and thus the modified text representation", column 6, line 23-24).

12. As per claim 12, Gould and Ramage demonstrated all the elements as applied to the rejection of independent claim 9, supra, and Gould further discloses software for changing the pattern density of a portion of the diagram characterized to its magnification or reduction in the diagram (since the pattern density changes with the magnification or reduction ration, it is inherent the indicator also indicates the changes in density).

13. Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (6,219,052) and Ramage as applied to claim 5 above, and further in view of Sakuma et al. (5,323,173).

14. As per claim 7, Gould and Ramage demonstrated all the elements as applied to the rejection of independent claim 5, supra.

Gould and Ramage disclose an apparatus of displaying images with varying resolutions. It is noted that Gould and Ramage do not explicitly disclose "a shade of color of a portion of the diagram is changed in correspondence to the magnification or reduction ratio", however, this is known in the art as taught by Sakuma et al., hereinafter Sakuma. Sakuma discloses a method of displaying image in which color is changed in accordance with changing scale factor (column 10, line 46-47).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sakuma into Gould and Ramage because Gould and Ramage disclose an apparatus of displaying images with varying resolution and Sakuma discloses the color of the image of changed resolution can be changed accordingly in order to easily discern the changes in image.

15. As per claim 11, Gould and Ramage demonstrated all the elements as applied to the rejection of independent claim 9, supra.

Gould and Ramage disclose a computer program for displaying images with varying resolutions. It is noted that Gould does not explicitly disclose "a shade of color of a portion of the diagram is changed in correspondence to the magnification or reduction ratio", however, this is known in the art as taught by Sakuma et al., hereinafter Sakuma. Sakuma discloses a method of displaying image in which color is changed in accordance with changing scale factor (column 10, line 46-47).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sakuma into Gould and Ramage because Gould and Ramage disclose a software program for displaying images with

varying resolution and Sakuma discloses the color of the image of changed resolution can be changed accordingly in order to easily discern the changes in image.

16. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (6,219,052), Masashi (JP PN 11-109945) and Ramage, and further in view of Smith (5,737,507).

17. As per claims 13, Gould, Masashi and Ramage demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Gould, Masashi and Ramage disclose a method of displaying images with varying resolutions. It is noted that Gould, Masashi and Ramage do not explicitly disclose linking the displaying of the diagram to a pointing device so that a display area is expanded when the area is pointed to by the pointing device, however, this is known in the art as taught by Smith. Smith discloses a display area resizing method in which "The user initiates resizing of window 102 by actuating button 210B on pointing device 210 while cursor 126 is positioned at point 304A and moving pointing device 210 while maintaining pointing device 210 in an actuated state" (column 7, line 37-41).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Smith into Gould, Masashi and Ramage because Gould, Masashi and Ramage disclose a method of displaying images with varying resolutions and Smith discloses the intended area can be scaled by a pointing device in order to easily manipulate the scaling.

18. As per claim 14, Gould, Masashi, Ramage and Smith demonstrated all the elements as applied to the rejection of claim 13, supra.

As for providing a numeric indication as number of bits to indicate the size of each portion, the method is notoriously well known in the art and would have been obvious to one of ordinary skill in the art to incorporate the method in order to know the exact size of the portion.

19. Claims 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (6,219,052) and Ramage, and further in view of Smith (5,737,507).

20. As per claims 15 and 18, Gould and Ramage demonstrated all the elements as applied to the rejection of independent claims 5 and 9, supra, respectively.

Gould and Ramage disclose a method of displaying images with varying resolutions. It is noted that Gould and Ramage do not explicitly disclose linking the displaying of the diagram to a pointing device so that a display area is expanded when the area is pointed to by the pointing device, however, this is known in the art as taught by Smith. Smith discloses a display area resizing method in which "The user initiates resizing of window 102 by actuating button 210B on pointing device 210 while cursor 126 is positioned at point 304A and moving pointing device 210 while maintaining pointing device 210 in an actuated state" (column 7, line 37-41).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Smith and Ramage into Gould because Gould and Ramage disclose a method of displaying images with varying resolutions and Smith discloses the intended area can be scaled by a pointing device in order to easily manipulate the scaling.

21. Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (6,219,052).

22. As per claims 16 and 19, Gould and Ramage demonstrated all the elements as applied to the rejection of claims 6 and 18, supra, respectively.

As for providing a numeric indication as number of bits to indicate the size of each portion, the method is notoriously well known in the art and would have been obvious to one of ordinary skill in the art to incorporate the method in order to know the exact size of the portion.

23. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (6,219,052), Ramage and Smith, and further in view of Kojima (6,081,277).

24. As per claims 17 and 20, Gould, Ramage and Smith demonstrated all the elements as applied to the rejection of claims 15 and 19, supra, respectively.

Gould, Ramage and Smith disclose a method of displaying images with varying resolutions. It is noted that Gould, Ramage and Smith do not explicitly disclose "said diagram is lines of alphanumeric characters and said certain portion is a magnified area of the characters including some but not all characters on some but not all lines of said characters and said reduced portions are characters and said reduced portions are characters in areas surrounding said magnified area that includes some but not all characters surrounding the magnified area", however, this is known in the art as taught by Kojima. Kojima discloses a method of controlling image display in which lines of characters are magnified or reduced (Figure 6 and 7 show lines of character and Figure 25 shows scaling in both vertical and horizontal direction).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kojima into Gould, Ramage and Smith because Gould, Ramage and Smith disclose a method of displaying images with varying resolutions and Kojima discloses that some portion of the image can be magnified and the surrounding area can be reduced in order to maintain the display of the whole image.

Response to Arguments

25. Applicant's arguments with respect to claims 1, 5-7 and 9-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiries

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ryan Yang** whose telephone number is **(703) 308-6133**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at **(703) 305-4713**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-47000377.

JEFFERY BRIER
PRIMARY EXAMINER

Ryan Yang
June 23, 2004